Abstract of the Disclosure

The present invention is directed to a virtual pan/tilt camera system and method for use with vehicles, and particularly ground vehicles (MGVs). The invention utilizes

5   autonomous navigation systems (ANSs) used with pan/tilt cameras, but eliminates the pan/tilt cameras substituting a plurality of video cameras. Each video camera is mounted in a fixed orientation on the vehicle and covers a selected angular range of lateral view. Commands from the ANS are mapped to

10   selected addresses where the video data from the video cameras are stored, and appropriately transformed data from the selected addresses are input to the ANS. Computers and software in the MGV receive video data from the cameras and stitch the imagery together into a single panoramic view.

15   Video data from cameras with overlapping fields of view are used to simulate the view of stereo cameras.